

#7

OIKE

RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/823,038A

TIME: 14:14:22

Input Set : A:\seqlistsub0701.txt

Output Set: N:\CRF3\07242001\I823038A.raw

P5

4 <110> APPLICANT: Strachan, Lorna
5 Sleeman, Matthew
6 Abernethy, Nevin
7 Onrust, Rene
8 Kumble, Anand
9 Murison, Greg

11 <120> TITLE OF INVENTION: Compositions Isolated From Stromal Cells
12 and Methods For Their Use

15 <130> FILE REFERENCE: 11000.1037c3

C--> 17 <140> CURRENT APPLICATION NUMBER: US/09/823,038A

C--> 17 <141> CURRENT FILING DATE: 2001-07-09

17 <160> NUMBER OF SEQ ID NOS: 61

19 <170> SOFTWARE: FastSEQ for Windows Version 4.0

21 <210> SEQ ID NO: 1

22 <211> LENGTH: 803

23 <212> TYPE: DNA

24 <213> ORGANISM: Mouse

26 <400> SEQUENCE: 1

27	gttctgaatg	ggagcatcag	ccctctctgg	gctgttgccc	cgacattaca	ggtcctgtct	60
28	ctcagggacg	tgggccttgg	ttctggcgct	gcagagatgg	acttctctgc	gtttgggaat	120
29	ctgcgggcgt	tggatctgtc	gggaaactcc	ctgaccagct	tccaaaagtt	caagggcagt	180
30	ttggcccttc	ggactctcga	cctccgcaga	aactctctca	cggccctccc	tcagagggtt	240
31	gtgtccgagc	agcctctgag	gggtctgcag	accatctacc	tcagccagaa	cccttatgac	300
32	tgctgtgggg	tggagggatg	gggggcccctg	cagcagcact	tcaagactgt	tgcggacttg	360
33	tccatgggtca	cttgcaacct	ctcttccaag	atcgctccgtg	tgggtggagct	gcccgaaggc	420
34	ctgcctcagg	gctgtaagtg	ggaacagggtg	gacactggctc	tcttctacct	cgtgctcatc	480
35	ctgcccagct	gcctcaccct	gctgggtggcc	tgtactgtcg	tcttctctcac	ttttaagaag	540
36	ccttttgett	aggtcatcaa	gagccgctgc	cactggctct	ccatatactg	acccgtgtgc	600
37	caaggctaga	gacttggttt	ttcctcgagg	atgctgtctc	ccgctggatc	tttacttttg	660
38	caggggtcga	gtgtgatgca	ttgaagggtta	aaactgaaat	ttgaaagagt	tccatcctca	720
39	gtcccattaa	cttctcctcc	catccgtgtg	atttatcctc	attgtccttg	tgaaatattt	780
40	attaaacgac	attctgtgag	att				803

42 <210> SEQ ID NO: 2

43 <211> LENGTH: 689

44 <212> TYPE: DNA

45 <213> ORGANISM: Mouse

47 <400> SEQUENCE: 2

48	gtgccttgag	gtccccgcgc	acgacgcact	caccatggcg	cctgctaacc	ttgggctgac	60
49	gcccgcactg	gtgatgtccc	tcgggtgccg	gctgtgtgtg	cttctgtccg	gagcctccgc	120
50	gcaggaacct	ccgagagtgg	gttgctctga	gtacacaaac	agatcctgtg	aagagtgcct	180
51	caggaatgtc	tctgtctgtt	ggtgcaatga	gaacaaggcg	tgtatggact	accagtgtg	240
52	gaaaatcttg	ccccctgctt	ctctctgtaa	attgagttcc	gctcgtctgg	gcgtatgctg	300
53	ggtgaacttc	gaggccttga	tcatcaccat	gtcgttctctg	gggggctctg	tgctcctggg	360
54	catcactgtg	tgtgtgtgct	actgtgtgcc	ccggaagaag	agccggaagc	cagacaagag	420
55	cgatgagcgg	gccatgagag	agcaggagga	gaggagagtg	cggcaggagg	aaaggagggc	480
56	ggaaatgaag	tcaagacatg	atgaaatcag	gaaaaaatac	ggtctgttta	aagaacaaaa	540
57	cccgtatgag	aagttctaag	gtggctggca	cacacttgtg	gtggatcgtg	cagttccaga	600

ENTERED

RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/823,038A

TIME: 14:14:22

Input Set : A:\seqlistsub0701.txt

Output Set: N:\CRF3\07242001\I823038A.raw

```

58 gtttcttggg aatgcactcc ccagcagagc ctgcagagac ctcaccacca tggccaccct 660
59 tgacctgggt gatccctcag cctctactg 689
61 <210> SEQ ID NO: 3
62 <211> LENGTH: 619
63 <212> TYPE: DNA
64 <213> ORGANISM: Mouse
66 <400> SEQUENCE: 3
67 ggcaccaggg aagccctgcc gggcctgtc ccacagaacc tgcacccca gatgccgccc 60
68 tatgcctttg ttcacccacc ctcccccctg ccacctgtgc ggcccgtgtt caacaacttc 120
69 cccatcaaca tgggtcctgt gcccgctccc tatgtccccc ctctgcccaa cgtgcgtgtc 180
70 aactatgact ttggccacat gcacgtgccc ctggagcaca acctgcccat gcactttggc 240
71 ccccaaccac ggcacgtcct ctgacaccca aagccctgtc agccgtgccg agtctgtagg 300
72 agggcccagt ctcactttct gagtaggggt gaaggcctcc attccctctc gaaagtggac 360
73 gcgtgtcctc ctgctcttac ctttgcaagg tccatgtctc ttcaggtctg atgccctctg 420
74 ggtgtgtgatt gtcactgggc caattatagg gcagctccct agtctgccat cttagcagcc 480
75 aatccagtgg cctgaccat gaagcaaggc ctctaactgt ttgccatact tcctcccag 540
76 cagcccaatg aaagcccagg gggaaatggc ctaccatccc taagccaggg ctctctcctt 600
77 gttgcccaag gccactta 619
79 <210> SEQ ID NO: 4
80 <211> LENGTH: 1630
81 <212> TYPE: DNA
82 <213> ORGANISM: Mouse
84 <400> SEQUENCE: 4
85 ggcgcgtgag cctcaggatg aaccctgtgt ttcctagcgg gctgtatggc tctcggtttt 60
86 tctcaacgct ccgctatggt ggccgcgggt gccggggtga cccggctgct agtgcctctg 120
87 ctgatggtag ccgcggtcc tagcagagcc cgaggcagcg gctgccgggt cggggcctcc 180
88 gcgcgtggga ccggggccga tggcctgaa gctgagggct gtggcaccgt ggctttgctg 240
89 ctggagcatt catttgagct cgggtatgga gccaaacttc agaagcagag cttgctgctc 300
90 tggaaccagc aggatggcac cctgtcggca acacagcgac agctcagtga ggaggagcgt 360
91 ggccgactcc gggatgtggc tgcgtgcaat ggccctctaca gggctcgggt cccgaggcgg 420
92 cctgggacac ttgatggttc agaagctggc ggccatgtgt ctccctcgt cccagcgtgc 480
93 tccctggtgg agtgcacct ttcggaccag ctgacctgac acgtggatgt ggcctggcaac 540
94 gtgggtgggc tgtctgtggt ggtgtacct gggggctgcc ggggctccga ggtggaagat 600
95 gaggacctgg agctgttcaa tacatctgtg cagctgcggc ctcccagcac tgcctcaggc 660
96 cccgagactg cagccttcat tgagcgctg gagatggagc aggccagaa ggccaagaac 720
97 ccacaggagc agaagtcttt ctttgccaaa tactggatgt acatcattcc agttgtgctg 780
98 ttccctcatga tgcgggagc gccggacgt gggggccagg gcggcggtgg gggcgggggc 840
99 agcagccggt gagcagctgt gccacctaga gccccccca gagccagccc aagaaggagt 900
100 tcctgacccc acatttccct attgcatgaa tatggaaggc tgtcccttca gtgagccctc 960
101 tggccttccct gtaagccct ctttctgtcc ctgagcctct ctctcatcct gttgactgag 1020
102 agcttggttg gacctccctg tagccagctc actgcaactg tgtcccacca tgtggcactg 1080
103 tgcctctctg tctgctaaac acccaccagc ctgccccacc ccacccacc atacactttg 1140
104 ggaacttgcc aagctctctc cagcctctgt gcctttgcc tgcaggcccc gtgcgcccct 1200
105 cactgtcact ctccagccct ttgccaagga tctgtggccc agaggcctct gctcttagtg 1260
106 gctaggtcag cctccagccc actgtccagg tggcatgctg tcttctttgc cccctctct 1320
107 ggtgccccag aataccatgg tgacctacca ctatccttct gcctttgga tgcataagcc 1380
108 tggatctgtc accaggagag gattgtgggc ctccacgtta gtctgtgaat gcacacttcg 1440
109 agtgacttgt gtgcaggttt tgagagccgg ttttgacta gctgctcgac agctgtggc 1500
110 atggccgtgc tcttgacat gcgcgctgt gggcatgggg attgctgtgc agcctcagct 1560

```

RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/823,038A

TIME: 14:14:22

Input Set : A:\seqlistsub0701.txt

Output Set: N:\CRF3\07242001\I823038A.raw

```

111 gtgttgtgtg gctgctgatt aaactgtccc ctaaacagca aaaaaaaaaa aaaaaaaaaa 1620
112 aaaaaaaaaa 1630
114 <210> SEQ ID NO: 5
115 <211> LENGTH: 1197
116 <212> TYPE: DNA
117 <213> ORGANISM: Mouse
119 <400> SEQUENCE: 5
120 ggcaccagac gactggggcc ctaccccatg tggacaacct caccatgcgt ctggaccccc 60
121 gtgtgggcgc ctacgtgata ggcgtagtga cagtgcagct gacagctaga gggatgatag 120
122 acccccaaac tagtggaact tgaagttttc ttcccagccg gttccagcct cctggaacaa 180
123 ccatgtcgcc agttttgcgc gtgccaaatt cacggcgctg cccaagcgga gctgctatct 240
124 gaattctcct tggatgtggc aaagggaaat gaacgcaaaa ggtgccgctg gaagtgtccg 300
125 acctagagaa atatgtagac cggagccctg ttaccttctt ccagcatgga ctctctggtt 360
126 ctctcttctg tctacttggc ctctcttatt atttgtgttg tctgatctg catcttcaca 420
127 aaaagccagc gtttgaaggc cgtggctcct ggaggagcac aggtagcact ggtccttggg 480
128 tactgcccgc atgtgaatac tgtgttaggt gctagtctgg aaggctcaca agacaagggg 540
129 atgtgagtc tctctttaat cctggcactt gggaggctga ggcttcgggg ccagttgggg 600
130 ctacatcgca agagcctgtg tccaaacaaa caaacgctt tctttttgct ttgagatagg 660
131 tcgaataggt cgaattttca aggttggctt tttaaacagt gtgtaatgtc tgtatttggg 720
132 tgtgactcct gtttgcttag acatgcttgt agcaggtgtg aactcaggag gacacaagt 780
133 accagaaagc tgagcatcta gctgtcaatc ttcccttcac attgtcccat ctgtcttccc 840
134 ttgggggtca aagcaaatg ggggcaagta gccacgaagg ggttgacttg ggaggacct 900
135 ggggatctgg aggccaatct tgagcatgga gcagacctga gggttaggga agcccacgtc 960
136 cacagcagcc tctgcacacc ccctttcccc acagactcca acagacacat tctgtgcagt 1020
137 caaggtagaa atggaggtgt tctctacacc tcctaaatcc tagcacttag gaagctgagg 1080
138 caggattatg aattccaggc tagctcgggt tatgtaatga gactgtttca aacacagagc 1140
139 ggagccgagg agatggctgg gcagtcacag agctgccgtg caaccagaac tggaggg 1197
141 <210> SEQ ID NO: 6
142 <211> LENGTH: 1435
143 <212> TYPE: DNA
144 <213> ORGANISM: Mouse
146 <220> FEATURE:
147 <221> NAME/KEY: misc_feature
148 <222> LOCATION: (1)...(1435)
149 <223> OTHER INFORMATION: n = A,T,C or G
151 <400> SEQUENCE: 6
152 catgggcgcc gtctggctag ccctgctggt cggcggggggt ctagctggag cgctcatcct 60
153 gtggctgctg cggggagact ctggggcccc ggggaaagac ggggttgagg agccgcgcga 120
154 gaagggcgca cctcctgggg aggtgcggc cccgggagac ggtccgggtg gtggtggcag 180
155 tggcggcctg agccctgaac ctccgatcg ggagctggtc tccaaagcag agcatcttcg 240
156 agaaagcaac ggacatttga tttctgagag caaagatctt ggtaacctgc cggaagcaca 300
157 gcggctgcag aatgttggag cagactgggt caatgccaga gagtttgttc ctgttgggaa 360
158 gattccagac acacactcca gggccgactc tgaagcggca agaaatcaaa gccaggatc 420
159 tcatggagga gaatggagac tcccaaaagg acaagaaaca gctgtcaaag tagctggcag 480
160 tgtggccgca aagctggcct ccagcagcct gcttgtggac agagctaaag cagtcagtca 540
161 ggaccaggca ggccacgagg actgggaagt ggtgtctagg cactcatctt gggggagtgt 600
162 tggtttgggt ggcagtcttg aggtctctag gttaagtcta aatcagagaa tggacgacag 660
163 cacaacagct ctgttgggag gaagaggctg ggaagtagat gggaaagtgg catctctgaa 720
164 acctcaacag gtcagcatcc agttccaggt gcactacacc acaaacaccg atgtgcagtt 780

```

RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/823,038A

TIME: 14:14:22

Input Set : A:\seqlistsub0701.txt

Output Set: N:\CRF3\07242001\I823038A.raw

```

165 cattgcagtg actggagacc atgagagcct tgggagatgg aacacatata tcccactcca      840
166 ctactgcaaaa gacgggctct ggtctcattc tgtcttcctg cctgcagaca cagtgggtgga      900
167 gtggaagtgc gtgttggtag agaataagga agttactcgt tgggaagaat gcagcaatag      960
168 attcctgcag actggccatg aggataaagt ggttcacggg tgggtggggga ttcactgact    1020
169 cagttttcag agcatccaag aggctgcagc agaattgtga caaggctaag gcttttagagc    1080
170 gcactgcata gcttaaagta aaggcgggtgt gattccaatt gtagccatca gggctctttc    1140
171 agatttgcta gtgtggcttt tgtccaaaat gtaggaagat gtatgcctgc agataatgct    1200
W--> 172 tctgttaanc tggcacttgt cccttattgt attgactggt ttgtgctgac acatcaggac    1260
173 ttgaggaatt gatcatcctg ggtagtgtgca tcttggttag tacacctgag gtatggacta    1320
174 catatgggca aggagcaact aagcaactgc acgggtacaa ggtagagcgc ccttagcagc    1380
175 tcttagacta gaaagactac aataagcccc atcaaacaca gctaaagcaa cactg      1435
177 <210> SEQ ID NO: 7
178 <211> LENGTH: 1131
179 <212> TYPE: DNA
180 <213> ORGANISM: Mouse
182 <400> SEQUENCE: 7
183 ggcaccagcc cggcttctgt gctccgctca gtctccagcg atccctccct acctccgccc      60
184 tccatggcgt cgctcctgtg ctgtgggcct aagctggcgc cctgtggcat cgtccctcagc    120
185 gcctggggag tgatcatggt gataatgctc gggatatttt tcaatgtcca ttctgctgtg    180
186 ttaattgagg acgttccctt cacagagaaa gattttgaga acggtcctca gaacatatac    240
187 aacctgtacg agcaagtcag ctacaactgt ttcatcgccg cgggcctcta cctcctcctc    300
188 ggaggtctct ccttctgcca agttcgtctc aacaagcgca aggaatacat ggtgcgctag    360
189 agcgcggtcc gcctctccct ccccagcccc cttctctatt taaagactcc gcagactccg    420
190 tcccactcat ctggcgctct ttgggacttg tgaccctagc gagacgtcat ccctggccct    480
191 gcaaaactgc gccagcctc tggaggagac cgagggtgac cgcgccccgt tctgaactac    540
192 aataaaaaga agcggttccc cctaagcttg ctgtctgtgc tttcaggag gggcgggccc    600
193 gggctggaag gggctgagac cggcctcatc gaggagtccg gaccctccga cggaggtgga    660
194 atgaagctag ccggaagtga agcaacgtct tccacctcgt cttcctccgc gcggcgaggc    720
195 cccttgagtg actggggaga ggtcgggtct cggccaatca gctgcaggga gggcgggact    780
196 ttctgcgcgg gagcccgagc ggccggctgc cgggctctcc gtggtttcca gctcgcgtgg    840
197 tgggtggtggc ggcggagcgt ctccgtgagg aggtgcgcgg ggccatgacg tcagcgtcca    900
198 ccaaggttgg agagatcttc tccgcggccg gcgcgcctt cacgaagctc ggggagttga    960
199 cgatgcagct gcatccagtc tcggactctt cccctgcccg tgccaagtgg acggagacgg    1020
200 agatagagat gctgagggct gctgtgaagc gctttgggga cgatcttaat cacatcagct    1080
201 gtgtcatcaa ggaacggaca gtggctcaga taaagaccac tgtgaagcga a      1131
203 <210> SEQ ID NO: 8
204 <211> LENGTH: 1357
205 <212> TYPE: DNA
206 <213> ORGANISM: Mouse
208 <400> SEQUENCE: 8
209 gggagggcct ggaggccgag gcgggcaggc accagccaga gcagctggcg gcagacggca      60
210 ggcagacagt cagaccgtct agcgggcctg gcttgccctac ctggcagctg caccgggtcc    120
211 ttcaccaga gctggttcca tagctcaaca tgggtcccctg gttcctcctg tctctgctgc    180
212 tacttgcgag gcctgtgcct ggggtggcct actctgtgtc actcccggcc tccttccctg    240
213 aggatgtagc cggcagcggg gaagctgagg gttcttcagc ctcttccccg agcctgccgc    300
214 cgctgggac tccagccttc agtcccacac cggagagacc ccagcccaca gctctggacg    360
215 gccccgtgcc accaccaac ctccctggaag ggatcatgga tttcttccgg cagtacgtga    420
216 tgctcatcgc ggtggtgggc tcgctgacct tctcatcat gttcatagtc tgcgccgccc    480
217 tcatcacgcy ccagaagcac aaggccacag cctactaccc atcctcgttc cctgaaaaga    540

```

RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/823,038A

TIME: 14:14:22

Input Set : A:\seqlistsub0701.txt

Output Set: N:\CRF3\07242001\I823038A.raw

```

218 agtatgtgga ccagagagac cgggctgggg gaccccgtag cttcagcgag gtccctgaca      600
219 gggcacctga cagccggcat gaagaaggcc tggacacctc ccatcagctc caggctgaca      660
220 ttctggctgc taccagaac ctccggtctc cagctagagc cctgccaggc aatggggagg      720
221 gagcaaagcc tgtgaagggt gggctcgagg aggaggagga agagggtctc agcggtcagg      780
222 aggaggccca ggaagcccca gtatgtgggg tctactgaaga gaagctgggg gtcccagagg      840
223 agtcggtctc agcagaggct gaaggggttc ctgccaccag tgagggccaa ggggaagcag      900
224 aagggtcttt ctcttagcc caggaatccc agggagcaac tggtcctcct gaaagtccct      960
225 gtgcctgcaa cagagtctcc cccagtgtct aacaggcccc agaactgctg ggaccgcaat     1020
226 gttgggtcct tgagggtcac ctctttggtc aagaaaggca ttcagctcta actgctcctt     1080
227 gataccacgt ggcttgacca ttgctggtgc caaggctgac cccgaactgg cagagccgat     1140
228 gccctctggt gcaccccagg aaacatctcc ccaagttcca gcgcccttaa tgactcttgc     1200
229 caccctgggg gcttcacctt aacgcaccac ttctctggaa ggggaaggcc agacacatgc     1260
230 cagttggggc tgcatgaggc agtctcaga gcagaagggg accaggccag aggccacctg     1320
231 tgacggggca aactgcctc cggctgtgga gaccaga                                1357
233 <210> SEQ ID NO: 9
234 <211> LENGTH: 815
235 <212> TYPE: DNA
236 <213> ORGANISM: Mouse
238 <400> SEQUENCE: 9
239 aggtcgacac tagtggatcc aaagaattcg gcacgagggg acgcggagcg gtcgctgctg      60
240 cggagagcag ctctgggcgc cgggcggttg ctgcgggcgc tcaggggcc tgggaacaat     120
241 ggcgctgtgc gcgcgggccg cgctgctgct gggcgtgctg caggtgctgg cgctgctagg     180
242 ggcggcgagc gacccgaccg acgctcaggg ctctgcaagt ggaaaccact cagtgtgac      240
243 ctccaatatt aacataacag agaataccaa ccagaccatg agtgtggttt ccaaccagac     300
244 cagtgaatg cagagcaccg cgaagccttc cgtactgcc aaaaactacca cacttatcac     360
245 tgtgaaacct gcaactattg ttaaaatata aaccccagga gtcttaccac atgtgacgcc     420
246 tactgcctca aagtctacac ccaatgcaag tgcttctcca aactctaccc acacgtcagc     480
247 atccatgaca accccagccc acagtagttt attgacaact gtaacggttt cagcaactac     540
248 tcatccacc aaaggcaaag gatccaagt ttagtccggc agctttgttg gtggtatagg     600
249 tgtaaacact gggagtttta tctattctct acattggatg caaaatgtat tattcaagaa     660
250 gaggcattcg gtaccgaagc attgacgaac atgatgccat catttaaagt acttcagtgg     720
251 tcaaggaag aagaaagact gcagccttat caattatttt ggtttatatt agtttaaact     780
252 attattttct tggaagtagt ataaacaagt catgc                                815
254 <210> SEQ ID NO: 10
255 <211> LENGTH: 1129
256 <212> TYPE: DNA
257 <213> ORGANISM: Mouse
259 <400> SEQUENCE: 10
260 ccaacactcg ccatgcgttc tggggcactg tggccgctgc tttggggagc cctggtctgg      60
261 acagtgggat ccgtgggcgc cgtgatgggc tccgaggatt ctgtgcccg tggcgtgtgc     120
262 tggctccagc agggcagaga ggccacctgc agtctggtgc tgaagactcg tgtcagccgg     180
263 gaggagtgtc gtgcttccgg caacatcaac accgcctggt ccaacttcac ccaccaggc     240
264 aataaaatca gcctgctagg gttcctgggc ctgctccact gcctcccctg caaagattcc     300
265 tgcgacggag tggagtgcgg ccccggaag gcgtgccgca atgctggggg ggcgtccaac     360
266 aactgcgagt gcgtgccc aa ctgcgagggg tttcccgcgg gcttccagg tgcggctct     420
267 gatggcgcca cctaccggga cgaatgcgaa ctgcgcaccg cgcgtgtcg cggacacca     480
268 gacttgccgc tcatgtaccg cgcccgctgt caaaagtctt gcgctcagg agtgtgccg     540
269 cgtccccagt cgtgccttgt ggatcagacc ggcagcgcac actgcgtggt gtgtcgcgt     600
270 gcgcctgcc cagtacctc caaccccggc caagaactct gtggcaacaa caacgttacc     660

```

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/823,038A

DATE: 07/24/2001

TIME: 14:14:23

Input Set : A:\seqlistsub0701.txt

Output Set: N:\CRF3\07242001\I823038A.raw

L:17 M:270 C: Current Application Number differs, Replaced Current Application No

L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:633 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21

L:866 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30